

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
8 July 2004 (08.07.2004)

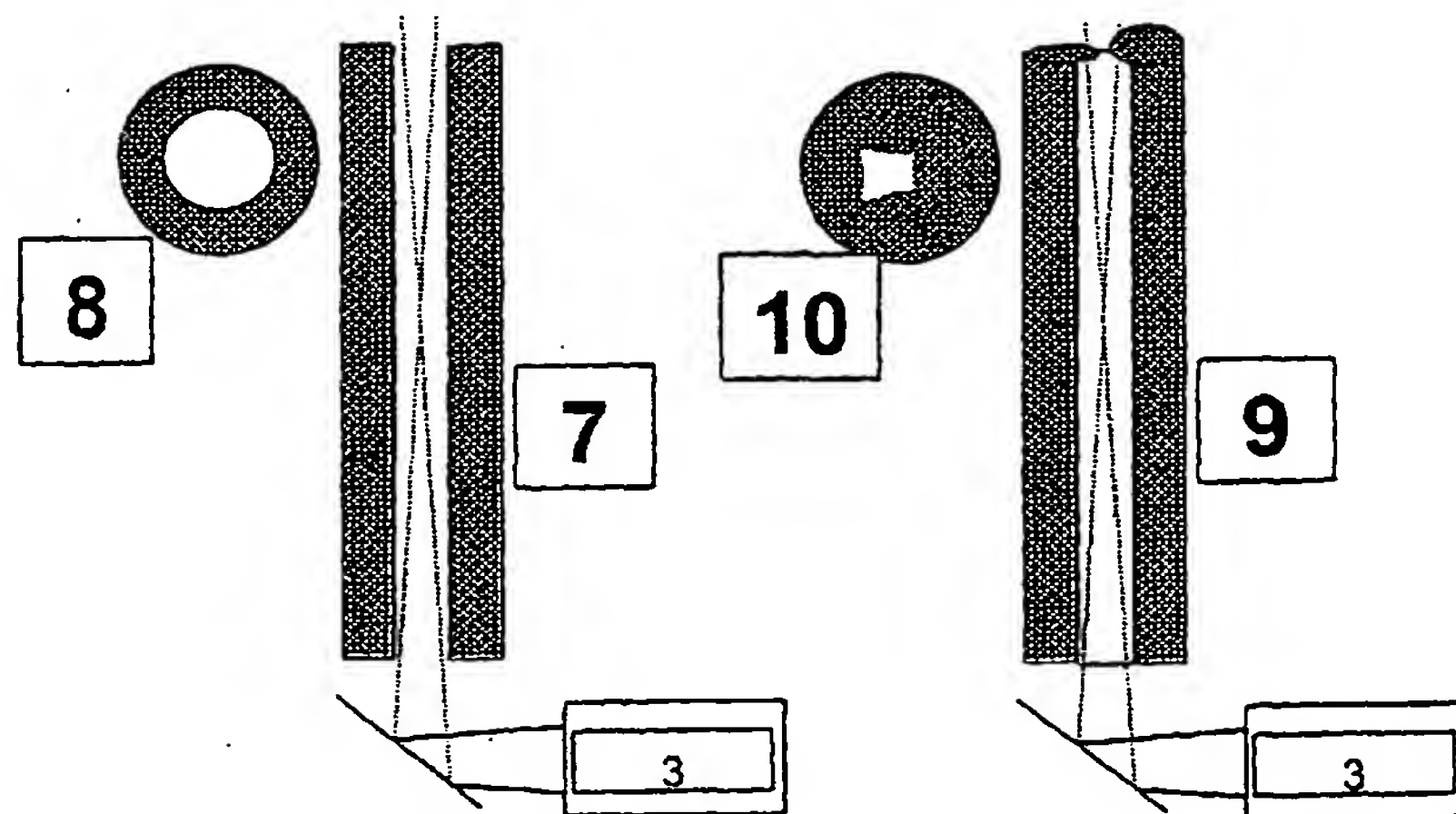
PCT

(10) International Publication Number  
**WO 2004/057286 A1**

- (51) International Patent Classification<sup>7</sup>: G01J 5/04, C21C 5/46
- (21) International Application Number: PCT/EP2003/012349
- (22) International Filing Date: 5 November 2003 (05.11.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 102 59 830.4 19 December 2002 (19.12.2002) DE
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- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: A PROCESS FOR KEEPING A TUYERE PASSING THROUGH A METALLURGICAL VESSEL FREE OF A SKULL



Light path of 3  
unobstructed

$$\begin{aligned} I_{(1)} &\rightarrow T_{(1)} \\ I_{(2)} &\rightarrow T_{(2)} \\ I_{(Q)} &\rightarrow T_{(Q)} \\ T_{(1)} &= T_{(2)} = T_{(Q)} \end{aligned}$$

Light path of 3  
obstructed

$$\begin{aligned} I_{(1)} &\rightarrow T_{(1)} \\ I_{(2)} &\rightarrow T_{(2)} \\ I_{(Q)} &\rightarrow T_{(Q)} \\ T_{(1)} &= T_{(2)} \neq T_{(Q)} \end{aligned}$$

(57) Abstract: The present invention relates to a process for keeping a tuyere passing through a metallurgical vessel free of a skull by intermittently passing an oxygen-containing gas through the tuyere to dissolve the skull, wherein it is determined that an interval for passing said oxygen-containing gas through the tuyere needs to be started by detecting electromagnetic radiation emanating from a spot in the interior of the melt by means of a dual wavelength pyrometer and comparing the intensity of the pyrometer signals with the ratio of the pyrometer signals, and initiating said interval for passing said oxygen-containing gas through the tuyere, upon the condition that the combined intensity of the signals falls below a predetermined threshold value and that the ratio of the signals remains substantially constant.

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Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,  
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,  
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— with international search report

— before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

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ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*